

REMARKS

The Non-Final Office Action of October 7, 2005 has been received and its contents carefully analyzed. Claims 1-26 and 29 remain pending in the application, of which claims 1, 8, 25, and 26 are independent claims. By this amendment, claims 1, 13, 25, and 26 are amended. Applicants respectfully submit that the above amendments do not add new matter to the application and are fully supported by the specification.

Applicants appreciate withdrawal of the finality of the previous Office Action pursuant to 37 C.F.R. §1.114. Applicants appreciate entry of Applicant's submission filed on July 29, 2005 and entry and consideration of Applicant's amended claims and remarks filed on June 30, 2005. Applicants appreciated withdrawal of the rejection of claims 8 and 9 under 35 U.S.C. §112, ¶2, due to the amendment to independent claim 1 made by Applicants. Applicants appreciate withdrawal of the rejection of claims 25 and 26 under 35 U.S.C. §103(a) as being unpatentable over Ito et. al. (U.S. Patent No. 5,652,067) due to the amendment by Applicants.

Entry of the Amendments and Remarks is respectfully requested because entry of Amendment places the present application in condition for allowance, or in the alternative, better form for appeal. No new matters are believed to be added by these Amendments. In view of the above amendments and the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

Rejections Under 35 U.S.C. § 103

In order to render a claim obvious, the combination of cited references must teach each and every element of the claimed invention and must provide teaching, motivation, or suggestion to combine. Nat'l Steel Car, Ltd. v. Canadian Pac. Rwy., 357 F.3d 1319, 1337 (Fed. Cir. 2004) (citing Ecolochem, Inc. v. S. Cal. Edison Co., 227 F.3d 1361, 1371 (Fed. Cir. 2000)).

This motivation must be based on the knowledge in the art, not knowledge provided by the application under examination, because such hindsight reconstruction is forbidden. In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988).

Ito et. al. (U.S. Patent No. 5,652,067)

Claims 1, 2, 4, 5, and 8-11 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U. S. Patent No. 5,652,067 issued to Ito, *et al.* ("Ito"). Applicants respectfully traverse this rejection for at least the following reasons.

Claim 1, as presently amended, recites:

An organic light-emitting diode for a display, wherein the electron injecting layer is formed using a shadow mask such that the electrical conducting layer of the cathode is electrically connected with the cathode contact layer and the electron injecting layer is not in direct contact with the cathode contact layer.

Ito fails to teach each and every claimed feature of amended claim 1, more particularly, Ito fails to teach that the electron injecting layer is formed using a shadow mask such that the electrical conducting layer of the cathode is electrically connected with the cathode contact layer and the electron injecting layer is not in direct contact with the cathode contact layer. Rather, Ito discloses formation of EITL 12 using vacuum deposition or a spin coating method (see col. 18, line 16-20) in contrast to the shadow mask method disclosed in Applicants' amended claim 1.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 1, 2, 4, 5, and 8-11. Since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed invention, Applicants respectfully submit that independent claim 1, and all the claims that depend therefrom, claims 2, 4, 5, and 8-11, are allowable.

Ito et. al. (U.S. Patent No. 5,652,067)

Claims 13, 14, 16, 17, and 20-23 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U. S. Patent No. 5,642,067 issued to Ito, *et al.* ("Ito"). Applicants respectfully traverse this rejection for at least the following reasons.

Claim 13, as presently amended, recites:

An organic light-emitting diode for a display, wherein the electron injecting layer is formed using a shadow mask such that the electron injecting layer is not in direct contact with the cathode contact layer.

Ito fails to teach each and every claimed feature of amended claim 1, more particularly, Ito fails to teach that the electron injecting layer is formed using a shadow mask such that the electrical conducting layer of the cathode is electrically connected with the cathode contact layer and the electron injecting layer is not in direct contact with the cathode contact layer. Rather, Ito discloses formation of EITL 12 using vacuum deposition or a spin coating method (see col. 18, line 16-20) in contrast to the shadow mask disclosed in Applicants' amended claim 13.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 13, 14, 16, 17, and 20-23. Since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed invention, Applicants respectfully submit that independent claim 13, and all the claims that depend therefrom, claims 14, 16, 17, and 20-23, are allowable.

Ito et. al. (U.S. Patent No. 5,652,067) in view of Kaneko et. al. (JP 09-082476)

Claims 12 and 24 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U. S. Patent No. 5,642,067 issued to Ito, *et al.* ("Ito") in view of Japanese Patent Application No. JP-09-082476, issued to Kaneko et. al. ("Kaneko"). Applicants respectfully traverse this rejection for at least the following reasons.

As noted above, Ito fails to teach each and every claimed feature of amended claims 1 and 13. Kaneko fails to cure the deficiencies of Ito. Accordingly, dependent claims 12 and 24 are allowable for at least the reasons discussed above with respect to independent claims 1 and 13.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 12 and 24. Since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed invention, Applicants respectfully submit that dependent claims 12 and 24 are allowable.

Ito et. al. (U.S. Patent No. 5,652,067) in view of Utsugi et. al. (U.S. Patent No. 5,837,391)

Claims 3 and 15 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U. S. Patent No. 5,642,067 issued to Ito, *et al.* ("Ito") in view of (U.S. Patent No. 5,837,391), issued to Utsugi et. al. ("Utsugi"). Applicants respectfully traverse this rejection for at least the following reasons.

As noted above, Ito fails to teach each and every claimed feature of amended claims 1 and 13. Utsugi fails to cure the deficiencies of Ito. Accordingly, dependent claims 3 and 15 are allowable for at least the reasons discussed above with respect to independent claims 1 and 13.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 3 and 15. Since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed invention, Applicants respectfully submit that dependent claims 3 and 15 are allowable.

Ito et. al. (U.S. Patent No. 5,652,067) in view of Liao et. al. (U.S. Patent Publication No. 2003/0170491).

Claims 6, 7, 18, 19, 25, 26, and 29 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U. S. Patent No. 5,642,067 issued to Ito, *et al.* ("Ito") in view of U.S.

Patent Publication No. 2003/0170491, issued to Liao et. al. ("Liao"). Applicants respectfully traverse this rejection for at least the following reasons.

As noted above, Ito fails to teach each and every claimed feature of amended claims 1 and 13. Liao fails to cure the deficiencies of Ito. Rather, Liao discloses the use of an integral shadow mask for forming the cathode (See page 13, paragraph [0189]), but fails to disclose the use of a shadow mask for the electron injecting layer. Accordingly, dependent claims 6, 7, 18, and 19 are allowable for at least the reasons discussed above with respect to independent claims 1 and 13.

With respect to independent claims 25 and 26, amended claims 25 and 26 recite:

A method of fabricating an organic light-emitting diode for a display, wherein a shadow mask is used to form the electron injecting layer such that the electron injecting layer is not in direct contact with the cathode contact layer.

As previously noted, Ito fails to teach each and every claimed feature of amended claims 1 and 13. Liao fails to cure the deficiencies of Ito. Rather, Liao discloses the use of an integral shadow mask for forming the cathode (See page 13, paragraph [0189]), but fails to disclose the use of a shadow mask for the electron injecting layer. Accordingly, dependent claim 29 is allowable for at least the reason of its dependency from independent claim 26.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 6, 7, 18, 19, 25, 26, and 29. Since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed invention, Applicants respectfully submit that independent claims 25 and 26 and dependent claims 6, 7, 18, 19, and 29 are allowable.


CONCLUSION

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicants' undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,



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